

# Case Study

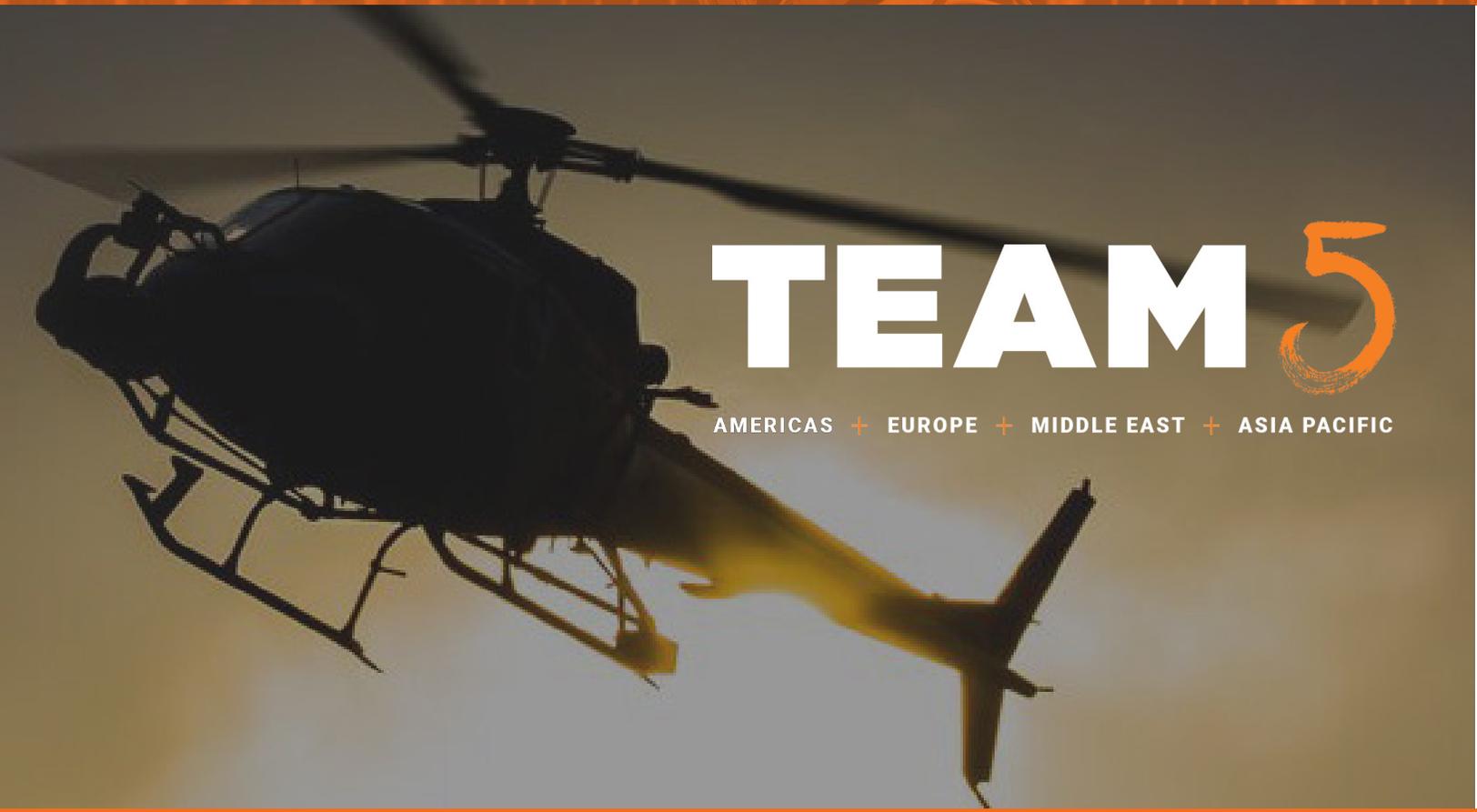
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# Telos Infinity® IP Intercom Flies High with Team5 Aerial

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*Telos*  
 INFINITY®

**TEAM** 



## The Client: Team5 Aerial

Dylan Goss grew up exploring movie sets alongside his father. As a teenager, he worked summer jobs on-set. After joining the camera department, he was invited to film from a helicopter and his passion for aerial cinematography was ignited. Today, Goss is a leading Aerial Director of Photography who works closely with Team 5 Aerial Systems, a boutique rental company specializing in big film cinematography for major feature films.

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## The Problem: Predictable Comms in Unpredictable Environments



When Goss arrives on set, he boards a helicopter and takes flight. Once airborne, the pilot's radio links directly to the safety coordinator below to reduce risks, but communication between the camera operator and the crew on the ground is limited.

As the Aerial Cinematographer, Goss would struggle from not being able to speak to the director in-flight. Due to the nature of the aircraft's comm system, he could only speak with the pilot, relying on him to relay messages to the film's director – a rather distracting and risky game of mid-air “telephone.”

A more effective method to sync the visuals with the ground team was needed. Direct, linear comms would enable Goss, his crew, and the film director to make quicker decisions, reducing the need for expensive retakes and repeating hazardous flight paths, shortening flight length. “The question became ‘how can I get feedback quicker and talk to them directly on a side channel?’, so we started looking for products to achieve this,” explains Goss.

Creating breathtaking visuals often involves visiting remote locations with harsh environments, so an intercom that didn't need big bandwidth was a must. Goss found that most low-bitrate options had poor audio quality or required a complicated setup, but when he trialed Telos Infinity, he quickly realized he'd found his solution.



## The Solution: Telos Infinity IP Intercom Takes Flight

Telos Infinity met the challenges of helicopter installation with ease. Using Power over Ethernet (PoE), Goss found Infinity to be a plug-and-play solution, with the benefits of high fidelity and full duplex audio. “A generator powers all equipment in the helicopter. When it comes on, everything else follows. Since Infinity is PoE, it’s ready to go after a quick systems check.”

Transporting audio in remote locations with limited bandwidth is not an easy task. A parabolic tracking dish is used to send a microwave link between two antennas, and when coupled with Infinity’s unique low-bit-rate mode, Goss gets intelligible, high-quality sound even in the most demanding conditions.

Part of his job as Director of Aerial Photography is supporting his clients in situations they’ve never been in. However, the time spent with a director on each project could be limited to no more than 2 hours. When filming a commercial for the US Navy, Goss found himself 30 miles offshore and had never met the director in person. With Telos Infinity installed, Goss had a peer-to-peer line with the director on shore. “Being on full duplex comms where I could hear their voice built an unexpected connection,” he says. While the submarine was being positioned below, Goss had the opportunity to speak with the director, and “at the end of the job, I felt like I knew him. That was the big takeaway for me.”



“The fact that I have an intimate, one-to-one connection is really important to me”

Goss' role on set is to capture eye-catching imagery, but not before considering safety risks. His expertise in the field helps reduce the number of times a pilot needs to fly for a shot, and Infinity, added to the mix, further improves his success rate. "It's very different to have that direct feedback. Anything we can do to make that communication tighter increases our safety," he says.

## Infinity Low Bitrate / VoIP Mode Explained

Telos Infinity Intercom is built on a matrix-free architecture that uses AES67 as the default audio transport stream over a Local Area Network (LAN). During the pandemic, it became apparent that customers needed a solution for remote working, usually over public internet connections, so we added onboard OPUS VoIP codecs

free of charge to our Infinity products, including the Beltpacks that Team 5 uses.



VoIP mode enables the audio from our devices to traverse Wide Area Networks (like the Internet) and VPN connections, where AES67 will not pass reliably or requires too high bandwidth. The OPUS codec has the added advantage of variable bitrate adjustment, which makes it perfect for

challenging environments like ground-to-air and ground-to-marine craft, or anywhere where high-quality voice communication is required but is challenging to achieve.

## Infinity Soars Like An Eagle

Each time Dylan Goss gets in a helicopter, it's a new adventure. He faces safety assessments, unpredictable environments, and limited bandwidth. Telos Infinity IP Intercom's low-latency, full-bandwidth audio ensures clearer and cleaner communications, enabling better understanding between parties during high-stress production. Its plug-and-play setup utilizing PoE provides an instant, peer-to-peer line of communication to the director. "My career is connecting with decision makers," notes Goss. "The fact that I have an intimate, one-to-one connection is really important to me." Telos Infinity IP intercom sets the scene for industry relationships to take flight.

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